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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/532,396 03/22/00 WANG

Y 6207.N CN1

HM12/0508

PHARMACIA & UPJOHN COMPANY
GLOBAL INTELLECTUAL PROPERTY
301 HENRIETTA STREET
KALAMAZOO MI 49001

EXAMINER

BAHAR, M

ART UNIT

PAPER NUMBER

1617

DATE MAILED:

05/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/532,396

Applicant(s)

WANG ET AL.

Examiner

Mojdeh Bahar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Applicants should be notified that they have not fulfilled the requirements of 37 CFR section 1.98 in that they have not supplied a list of all patents, publications, or other information, submitted for consideration by the USPTO, e.g., PTO-1449 or other similar listing.

Please note that the documents listed in the IDSs submitted June 14, 2000 and January 12, 2001 have however, been considered by the examiner in order to expedite prosecution herein. A listing of documents discussed in the same IDSs is requested in response to this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romines et al., (USPN 5,852,195) and Suzuki et al. (USPN 5,693,337).

Romines et al., (USPN 5,852,195) teaches the pyranone compound of formula I recited in claim 1 of the instant application. Romines et al., (USPN 5,852,195) also teaches that the pyranone compound can be administered orally and parenterally. Romines et al., (USPN 5,852,195) further teaches that also parenteral suspensions of the pyranone composition can be prepared. See claims, more specifically claim 3, as well as col. 47 lines 61-65 and col.48 lines 21-47.

Romines et al., (USPN 5,852,195) does not teach the incorporation of pyranone in an emulsion. Consequently neither does it teach the employment of lecithin, an oil component, a liquid phase or weight percentages of each of the said components.

Suzuki et al. (USPN 5,693,337) teaches a stable lipid emulsion comprising water, an oil component and yolk and/or soy bean lecithin, see abstract. Furthermore Suzuki et al. (USPN 5,693,337) teaches that similar effects are expected from dimyristoylphosphatidylcholine and dipalmitoylphosphatidylcholine and are used with yolk lecithin and/or soybean lecithin, col. 3, lines 1-12. Suzuki et al. (USPN 5,693,337) teaches the amount of emulsifying agents (i.e., lecithin) to be from 1/50 to 3 parts by weight, col. 3, lines 13-17. Moreover the oil component in Suzuki et al. (USPN 5,693,337) include mono-, di- or triglycerides whose acid components are C6-C20 saturated and/or unsaturated fatty acids and mixtures comprising at least two members of these glycerides. The amount of these oil components is not particularly restricted, but preferably ranges from 0.1 to 50%, col. 4, lines 54-67. Finally, Suzuki et al. (USPN 5,693,337) teaches that many different types of drugs including antiviral drugs can be added to the lipid emulsion, see col. 5 and col.6.

Romines et al., (USPN 5,852,195) and Suzuki et al. (USPN 5,693,337), taken together, do not teach the particular ratios of the mixture of mono-, di- and triglycerides. Moreover they do not particularly teach the weight ratio of the pyranone compound of formula I in the emulsion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the anti-retroviral composition of Romines et al., (USPN 5,852,195) in the lipid emulsion taught by Suzuki et al. (USPN 5,693,337). It would have further been obvious

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to optimize the amounts of the pyranone compound and the sub-components of the oil component of the Suzuki et al.'s emulsion.

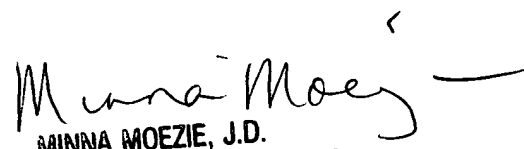
One of ordinary skill in the art would have been motivated to incorporate the antiretroviral pyranone compound in a stable lipid emulsion such as that of Suzuki et al. (USPN 5,693,337) for its storage stability as well as potentially increased solubility. Moreover optimization of amounts is within the purview of the skilled artisan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mojdeh Bahar whose telephone number is (703) 305-1007. The examiner can normally be reached on (703) 305-1007 from 8:30 a.m. to 6:30 p.m. Monday, Tuesday, Thursday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minna Moezie, J.D., can be reached on (703) 308-4612. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Mojdeh Bahar
Patent Examiner
May 4, 2001


MINNA MOEZIE, J.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600